IN THE CLAIMS:

Please amend the claims as shown below. The claims, as pending in the subject application, now read as follows:

1. (Currently amended) A method of correcting a forward model of an input color device ~~mapping a device dependent color value depending on a color input device to a device independent color space~~, comprising:

mapping ~~converting~~ an input color value ~~the device dependent color value~~ generated by the input color device into a mapped color value in a device-independent color space ~~value~~ by using the ~~a~~ forward model of the color input device;

clipping a negative luminance component of the mapped color value in the device-independent color space ~~value~~ to a non-negative value;

determining whether or not the ~~clipped~~ mapped color value in the device-independent color space ~~device independent color value~~ is outside a human visual gamut; and

generating a corrected color value in the device independent color space by clipping ~~mapping~~ the mapped color value in the device-independent color value outside the human visual gamut to a boundary of the human visual gamut based on the determination result.

2. (Previously presented) The method of claim 1, wherein clipping the luminance component sets the luminance component of the device-independent color value which has a negative value and chromaticity components to zero.

3. (Canceled)

4. (Currently amended) The method according to claim 2, wherein the luminance component of the device-independent color value is not clipped at an upper bound in the clipping wherein the luminance component of the device-independent color value is allowed to take a value higher than a diffuse white point of the device-independent color space.

5. (Previously presented) The method of claim 1, wherein the mapping maps the clipped device-independent color value outside the human visual gamut to an intersection between a line defined by the clipped device-independent color value and a white point and the boundary of the human visual gamut.

6. (Previously presented) The method of claim 1, wherein the boundary is the ISO standard CIE spectral locus on a chromaticity space.

7. (Original) The method of claim 6, wherein the chromaticity space is the CIE chromaticity xy plane.

8. (Original) The method of claim 6, wherein the chromaticity space is the CIE Uniform Chromaticity Scale (UCS) u'v' plane.

9. (Previously presented) The method of claim 1, wherein the device-independent color space is CIEXYZ.

10. (Previously presented) The method of claim 1, wherein the device-independent color space is CIELUV.

11. (Previously presented) The method of claim 1, wherein the device-independent color space is CIELAB.

12. (Currently amended) A data processing system for correcting a forward model of an input color device ~~mapping a device dependent color value depending on a color input device to a device independent color space~~, comprising:

a processor;

a memory coupled to the processor, the memory having program instructions executable by the processor stored therein, the program instructions comprising:

mapping ~~converting~~ an input color value ~~the device dependent color value~~ generated by the input color device into a mapped color value in a device-independent color space ~~value~~ by using the ~~a~~ forward model of the color input device;

clipping a negative luminance component of the mapped color value in the device-independent color space ~~value~~ to a non-negative value;

determining whether or not the ~~clipped~~ mapped color value in the device-independent color space ~~device independent color value~~ is outside a human visual gamut; and

generating a corrected color value in the device independent color space by clipping ~~mapping~~ the mapped color value in the device-independent color value outside the human visual gamut to a boundary of the human visual gamut based on the determination result.

13. (Previously presented) The data processing system of claim 12, wherein the program instructions for clipping the luminance component set the luminance component of the device-independent color value which has a negative value and chromaticity components to zero.

14. (Canceled)

15. (Currently amended) The data processing system of claim 13, wherein the luminance component of the device-independent color value is not clipped at an upper bound in the clipping wherein the luminance component of the device-independent color value is allowed to take a value higher than a diffuse white point of the device-independent color space.

16. (Previously presented) The data processing system of claim 13, wherein the mapping maps the clipped device-independent color value outside the human

visual gamut to an intersection between a line defined by the clipped device-independent color value and a white point and the boundary of the human visual gamut.

17. (Previously presented) The data processing system of claim 12, wherein the boundary is the ISO standard CIE spectral locus on a chromaticity space.

18. (Original) The data processing system of claim 17, wherein the chromaticity space is the CIE chromaticity xy plane.

19. (Original) The data processing system of claim 17, wherein the chromaticity space is the CIE Uniform Chromaticity Scale (DCS) u'v' plane.

20. (Previously presented) The data processing system of claim 12, wherein the device-independent color space is CIEXYZ.

21. (Previously presented) The data processing system of claim 12, wherein the device-independent the color space is CIELUV.

22. (Previously presented) The data processing system of claim 12, wherein the device-independent color space is CIELAB.

23. (Currently amended) A computer-readable medium having program instructions for correcting a ~~color value generated by a~~ forward model of an ~~for a color~~ input color device, the program instructions comprising:

mapping ~~converting~~ an input color value ~~the device dependent color value~~ generated by the input color device into a mapped color value in a device-independent color space ~~value~~ by using the ~~a~~ forward model of the color input device;

clipping a negative luminance component of the mapped color value in the device-independent color space ~~value~~ to a non-negative value;

determining whether or not the ~~clipped~~ mapped color value in the device-independent color space ~~device-independent color value~~ is outside a human visual gamut; and

generating a corrected color value in the device independent color space by clipping ~~mapping~~ the mapped color value in the device-independent color value outside the human visual gamut to a boundary of the human visual gamut based on the determination result.

24. (Previously presented) The computer-readable medium of claim 23, wherein the program instructions for clipping the luminance component set the luminance component of the device-independent color value which has a negative value and chromaticity components to zero.

25. (Canceled)

26. (Currently amended) The computer-readable medium of claim 25, wherein the luminance component of the device-independent color value is not clipped at an upper bound in the clipping wherein the luminance component of the device-independent color value is allowed to take a value higher than a diffuse white point of the device-independent color space.

27. (Previously presented) The computer-readable medium of claim 26, wherein the mapping maps the clipped device-independent color value outside the human visual gamut to an intersection between a line defined by the clipped device-independent color value and a white point and the boundary of the human visual gamut.

28. (Previously presented) The computer-readable medium of claim 27, wherein the boundary is the ISO standard CIE spectral locus on a chromaticity space.

29. (Previously presented) The computer-readable medium of claim 28, wherein the chromaticity space is the CIE chromaticity xy plane.

30. (Previously presented) The computer-readable medium of claim 28, wherein the chromaticity space is the CIE Uniform Chromaticity Scale (UCS) u'v' plane.

31. (Previously presented) The computer-readable medium of claim 23, wherein the device-independent color space is CIEXYZ.

32. (Previously presented) The computer-readable medium of claim 23, wherein the device-independent color space is CIELUV.

33. (Previously presented) The computer-readable medium of claim 23, wherein the device-independent color space is CIELAB.